

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference P17811WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB 03/05231	International filing date (<i>day/month/year</i>) 18.11.2003	Priority date (<i>day/month/year</i>) 07.04.2003
International Patent Classification (IPC) or both national classification and IPC H04L12/56		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON (PUBL) et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

I ☒ Basis of the opinion

II ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

IV ☒ Lack of unity of invention

V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

Date of submission of the demand 05.11.2004	Date of completion of this report 11.08.2005
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Forster, G Telephone No. +49 89 2399-8986



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International application No. PCT/IB 03/05231

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1, 3-43 as originally filed
2, 2a received on 15.07.2005 with letter of 13.07.2005

Claims, Numbers

1-34 as originally filed

Drawings, Sheets

1/20-20/20 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:
- ☐ restricted the claims.
 - ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
- ☒ all parts.
 - ☐ the parts relating to claims Nos. .

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-34
	No: Claims	
Inventive step (IS)	Yes: Claims	1-34
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-34
	No: Claims	

2. Citations and explanations

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see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 03/05231

to section IV.

1. Claims 1-14 and 23 to 34 relate to methods for controlling the transmission flow rate and the transcoding rate of a media gateway in a data bit transfer session from a serving entity to a client, whereas the session involves transmission of data bits over a wireless communication link.

Claims 15 to 22 relate to a method for negotiating the transmission flow rate in a data bit transfer session from a first mobile entity to a second mobile entity, whereas the session involves transmission of data bits over at least one wireless communication link.

These two inventions are not considered to be linked by a common inventive concept, Rule 13.1 PCT because there does not exist a technical relationship involving one or more of the same or corresponding special technical features in the sense of Rule 13.2 PCT between these two inventions.

Since the applicant has paid additional fees, all parts of the application were subject of examination.

to section V.

1. The first invention concerning claims 1-14 and 23 to 34 relates to a method for controlling the transmission flow rate of data bits in a data bit transfer session from a serving entity to a client and to a method for controlling the transcoding rate of a media gateway during a data bit transfer session from the media gateway to a client, according to the features of the independent claims 1 and 23 respectively.

The second invention concerning claims 15 to 22 relates to a method for negotiating the transmission flow rate of data bits in a data bit transfer session from a first mobile entity to a second mobile entity, according to the features of the independent claim 15.

2. The closest prior art document is considered to be document WO02/052800 (first document cited in the international search report) and is acknowledged in the

opening part of the description.

3. According to the features of claim 1 the inventive step consists in the special way of setting up the data transfer bit session by providing a radio control node to establish flow rate parameters relating to the wireless link, monitoring the wireless communication link and based on monitoring, sending new flow rate parameters so that the serving entity can update the transmission rate of the session in accordance with the new rate control parameters. In case of claim 23 the inventive step consists in the special way of setting up the data transfer bit session by providing a radio control node to establish transcoding rate parameters relating to the wireless link, monitoring the wireless communication link and based on monitoring, sending new transcoding rate parameters so that the media gateway can update the transmission rate of the session in accordance with the new transcoding rate parameters.

According to the features of claim 15 the inventive step consists in the special steps of the method for negotiating the transmission flow rate of data bits comprising providing a first and a second radio control node, resolving addressing between these two control nodes to allow communication between these two control nodes, sending rate control parameters to the control nodes for the respective link, matching the rate control parameters to obtain the actual bit transmission rate, and sending an indicator of the actual bit transmission rate to the mobile entities so that the bit transmission can occur at the transmission rate.

The underlying concept is not disclosed in or rendered obvious by the cited prior art documents. The subject-matter of the independent claims thus fulfils the requirements of Article 33 PCT.

4. The dependent claims contain further details on the subject-matter of the respective independent claims. These dependent claims merely limit the scope of protection sought by the independent claims and are therefore also considered to fulfil the requirements of Article 33 PCT.